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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,473	04/24/2001	Gerald D. Sauder	12748-0010	5310

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EXAMINER

MATECKI, KATHERINE A

ART UNIT

PAPER NUMBER

3654

DATE MAILED: 11/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/841,473	SAUDER ET AL.	
	Examiner Katherine Matecki	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 September 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on 27 September 2002 is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) Interview Summary (PTO-413) Paper No(s) ____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: ____.

Drawings

The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 27 September, 2002, have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Objections

Claim 2 is objected to because of the following informalities: on line 2, "overrunning" is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 9, 15, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Hedlund.

Hedlund shows an apparatus for storing an elongate member, comprising a support frame 5, a spool 8 rotatably supported by the support frame 5 and having a

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cylindrical body and a pair of flanges extending radially outwardly from opposite ends of the cylindrical body, and an elongate member wound about the spool, the elongate member having a free end extending from the support frame, and a fixed end 12 fixed to the spool (see figure 1). A spring rewind motor 22 is operatively disposed between the support frame and the spool, the spring rewind motor exerting a torque on the spool in a first rotational direction caused by the pawing you of the elongate member from the spool (see column 2, lines 58-63). A viscous clutch assembly 25 is operatively disposed between the spool and the support frame to exert a retarding torque between the spool and the support frame, the viscous clutch comprising a housing 26 defining a sealed chamber, a viscous liquid contained in the chamber (see column 3, line 25), and a plurality of vanes 28, 30 disposed in the chamber. A unidirectional clutch assembly 41 is operatively disposed between the spool and the support frame, the unidirectional clutch assembly operating to disengage the viscous clutch assembly when the spool is rotating in the first, payout direction of the spool, and operating to engage the viscous clutch assembly such that the viscous clutch exerts a retarding torque between the spool and the frame to limit rotational velocity of the spool when the spool is rotated to rewind the elongate member (see column 1, lines 17-21, and column 3, lines 59-67).

The viscous clutch of Hedlund meets the limitation of the claims that it is "between" or "operatively disposed between" the spool and the support frame, since it is located in the path of transmission of torque between these two elements. This interpretation of the claim language is consistent with Applicant's

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usage, in which the viscous clutch 50 is described as being between the spool 26 and support frame 34.

With respect to claims 7, 15, and 18, the vanes of Hedlund comprise a plurality of stator and rotor discs 28 and 30, such that the viscous liquid is sheared in a plurality of annular gaps between the discs.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-6 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hedlund.

In the apparatus of Hedlund described above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of well-known unidirectional clutch, including a ramp and ball clutch, a ratchet and pawl, a sawtooth axial gear clutch, a ramp and roller clutch, or a helical spring clutch, to comprise the unidirectional coupling 41, because each of the claimed unidirectional clutches functions in substantially the same way and achieves an identical result. Hedlund discloses that the configuration of the coupling 41 is not critical, but rather may be any per se known coupling. It would be well within the

level of skill of one skilled in the art to select from among known unidirectional couplings.

Claims 8, 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hediund in view of Hiraoka.

Hiraoka discloses an apparatus for storing an elongate member by winding, including a viscous clutch assembly including a housing 3 which defines a sealed chamber, a viscous liquid therein, and a plurality of vanes or paddles 12 disposed within the sealed chamber. In as much as Applicant's specification does not provide a description of the structural difference between a vane and a paddle, the structure shown by Hiraoka is considered to be accurately described by either term.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of Hedlund with a viscous clutch which includes a plurality of vanes or paddles as taught by Hiraoka, because the vanes or paddles would provide a different level of resistance than the disks of Hiraoka, which would be desirable based on the type of material stored on the reel.

Response to Arguments

Applicant's arguments filed 27 September, 2002, have been fully considered but they are not persuasive.

In his remarks, Applicant argues that the Wolner reference does not teach the particular structure and functionality of the unidirectional clutch and viscous clutch specified in amended claim 1. As pointed out in the grounds of rejection above, the newly applied reference to Hedlund does teach a unidirectional clutch

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assembly that engages a viscous clutch when the reel is *retracting* an elongate member. Both Wolner and the newly applied Hedlund reference teach a *unidirectional* clutch that engages the viscous damper to apply a force upon rotation of the spool in only one direction.

In his remarks, Applicant argues that the combined teachings of Wolner and Hiraoka would render Wolner unsuitable for its intended purpose because the resulting device would brake the cable during retraction rather than during pay out. Presuming that this argument would also be advanced with regard to the rejection now applied to the claim based on the combined teachings of Hedlund and Hiraoka, it is noted that the secondary reference to Hiraoka is relied upon merely to show an alternative configuration for the viscous clutch, used in a similarly structured device. One skilled in the art would not be motivated to change the direction in which the viscous brake of Hedlund is activated based on the teachings of Hiraoka; however, the rejection does not propose such a modification. One skilled in the art would recognize that the vanes or paddles of Hiraoka would provide differing amounts of braking force which could advantageously be selected by one skilled in the art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

The limitations added to claims 1, 9, and 17, regarding the direction of rotation in which the viscous brake is active, necessitated the new grounds of rejection.

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathy Matecki, whose telephone number is (703) 308-2688.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-1113.

The facsimile number for official correspondence related to this application is (703) 305-7687.

kam
November 14, 2002

Katherine Matecki
KATHERINE MATECKI
SUPERVISORY PATENT EXAMINER
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